INDEX

BATCHELOR, G. K. Small-scale variation of convected quantities like temperature in turbulent fluid. Part 1. General discussion and the case of small conductivity, 113

BATCHELOR, G. K., HOWELLS, I. D. and TOWNSEND, A. A. Small-scale variation of convected quantities like temperature in turbulent fluid. Part 2. The case of large conductivity, 134

BINNIE, A. M. Instability in a slightly inclined water channel, 561

BIRD, G. A. The effect of wall shape on the degree of reinforcement of a shock wave moving into a converging channel, 60

BROGAN, T. R. *See* PATRICK and BROGAN

CORCOS, GILLES M. and SELLARS, JOHN R. On the stability of fully developed flow in a pipe, 97

DAVIES, T. V. On the forced motion due to heating of a deep rotating liquid in an annulus, 593

DEGROFF, HAROLD *See* HROMAS and DEGROFF

ELDER, J. W. Steady flow through non-uniform gauzes of arbitrary shape, 355

ELDER, J. W. The dispersion of marked fluid in turbulent shear flow, 544

FRAENKEL, L. E. A cylindrical sound pulse in a rotating gas, 637

GOLDSWORTHY, F. A. The structure of a contact region, with application to the reflexion of a shock from a heat-conducting wall, 164

HAQUE, S. M. A. The effect of eddy viscosity on the velocity profile of steady flow in a uniform rough channel, 310

HAMMITT, ANDREW G. The hypersonic viscous effect on a flat plate with finite leading edge, 242

HASIMOTO, H. On the periodic fundamental solutions of the Stokes equations and their application to viscous flow past a cubic array of spheres, 317

HOWELLS, I. D. *See* BATCHELOR, HOWELLS and TOWNSEND

HROMAS, LESLIE and DEGROFF, HAROLD Experimental search for the effect of compressibility in unsteady Couette flow, 140

KARLSSON, STURE K. F. An unsteady turbulent boundary layer, 622

KRAICHNAN, ROBERT H. The structure of isotropic turbulence at very high Reynolds numbers, 497

KYNCH, G. J. The slow motion of two or more spheres through a viscous fluid, 193

LEITE, RICHARD J. An experimental investigation of the stability of Poiseuille flow, 81

LIU, V. C. On the drag of a flat plate at zero incidence in almost-free-molecule flow, 481

LUDFORD, G. S. S. The structure of a hydromagnetic shock in steady plane motion, 67

LUDFORD, G. S. S. The propagation of small disturbances in hydromagnetics, 387

MERK, H. J. Rapid calculations for boundary-layer transfer using wedge solutions and asymptotic expansions, 460

MORTON, B. R. Forced plumes, 151

PATRICK, R. M. and BROGAN, T. R. One-dimensional flow of an ionized gas through a magnetic field, 289

PEARSON, J. R. A. The effect of uniform distortion on weak homogeneous turbulence, 274

PHILLIPS, O. M. The scattering of gravity waves by turbulence, 177

RESLER, E. L. *See* SEARS and RESLER

ROGERS, RUTH H. The structure of the jet-stream in a rotating fluid with a horizontal temperature gradient, 41

SEARS, W. R. and RESLER, E. L. Theory of thin airfoils in fluids of high electrical conductivity, 257

SELLARS, JOHN R. *See* CORCOS and SELLARS

SHARP, A. W. The supersonic flow past a leading edge separation bubble, 445

SILBERMAN, EDWARD. Experimental studies of supercavitating flow about simple two-dimensional bodies in a jet, 337

STEWARTSON, K. On the stability of a spinning top containing liquid, 577

STRATFORD, B. S. The prediction of separation of the turbulent boundary layer, 1

STRATFORD, B. S. An experimental flow with zero skin friction throughout its region of pressure rise, 17

TOOMRE, ALAR A pulsating sphere in a rotating fluid, 571

TOWNSEND, A. A. Temperature fluctuations over a heated horizontal surface, 209

TOWNSEND, A. A. *See* BATCHELOR, HOWELLS and TOWNSEND

VERONIS, G. Cellular convection with finite amplitude in a rotating fluid, 401

WHITHAM, G. B. A new approach to problems of shock dynamics. Part 2. Three-dimensional problems, 369

YIH, CHIA-SHUN Two solutions for inviscid rotational flow with corner eddies, 36

YIH, CHIA-SHUN Ring vortices generated electromagnetically, 436

REVIEWS

Collected works of Theodore von Kármán, Vols. I–IV, 329

Statistical Theory of Irreversible Processes, by R. EISENSCHITZ, 491

An Introduction to Fluid Dynamics, by G. TEMPLE, 493

Mathematical Theory of Compressible Fluid Flow, by RICHARD VON MISES, 494

Theorie schlallnaher Strömungen, by K. G. GUDERLEY, 650

Rheology: Theory and Application, Vol. II, edited by F. R. EIRICH, 652